

REMARKS


The specification has been amended to correct typographical and other minor errors of a formal nature. No new matter has been added.

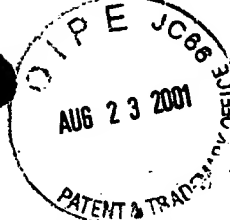
Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

Paragraph beginning at line 7 of page 4 has been amended as follows:

[In] U.S. Pat. Nos. 5,592,490 to Barratt et al., 5,828,658 to Ottersten et al., and 5,642,353 Roy III, teach about spectrally efficient high capacity wireless communication systems using multiple antennas at the transmitter; here a Base Transceiver Station (BTS) for Space Division Multiple Access (SDMA). In these systems the users or receive units have to be sufficiently separated in space and the BTS uses its transmit antennas to form a beam directed towards each receive unit. The transmitter needs to know the channel state information such as "spatial signatures" prior to transmission in order to form the beams correctly. In this case spatial multiplexing means that data streams are transmitted simultaneously to multiple users who are sufficiently spatially separated.

Paragraph beginning at line 19 of page 12 has been amended as follows:

BTS 12 has an antenna array 16 consisting of a number of transmit antennas 18A, 18B, ..., 18M. Receive units 14 are equipped with antenna arrays 20 of N receive antennas (for details see Figs. 2, 4). BTS 12 sends transmit signals TS to all receive units 14 via channels 22A and 22B. For simplicity, only channels [20A, 20B] 22A, 22B between BTS 12 and receive units 14A, 14B are indicated, although BTS 12 transmits TS signals to all units shown. In this particular case receive units 14A, 14B are both located within one cell 24. However, under suitable channel conditions BTS 12 can transmit TS signals to units outside cell 24, as is known in the art.